

REMARKS

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 18 – 25 and 29 – 36 are pending in the application. Currently, claims 18 and 19 stand allowed and claims 20 – 25 and 29 – 36 stand rejected.

By the present amendment, claims 21, 29, 35 and 36 have been amended and claim 31 has been cancelled.

In the office action mailed June 2, 2003, claims 20 – 25, 29 – 34 and 36 were rejected under 35 U.S.C. 112, first paragraph and claims 20 – 25 and 29 – 36 were rejected under 35 U.S.C. 112, second paragraph.

The foregoing rejections have been traversed by the instant response.

With regard to the rejection under 35 U.S.C. 112, first paragraph, the Examiner is hereby requested to consider the following comments in support of Applicants' position that the teachings set out in the specification are sufficient to enable one skilled in the art to make and/or use the claimed invention without any undue experimentation.

The invention subject matter of the present patent application discloses compounds of formula (IV) and compositions which use said compounds to vector active ingredient in cells or in cell organs.

The instant specification discloses examples of peptides derived from beta-stranded antibiotic peptides and, more particularly, derived from protegrin and tachyplesin. The peptide internalization properties are disclosed in Example 3, point 4.

One skilled in the art learns from said example the effect of amphipathicity and hydrophobia on the peptide properties. As a consequence, one of skill in the art can use the teaching of the tested peptides for other peptides of general formula (I), (II), (V) or (VI).

Further, example 4 discloses the internalization of doxorubicin vectored thanks to a peptide of the present invention (SM 1738).

Applicants do not believe that the patent statutes require that for a sufficient disclosure a patent application must exemplify all kinds of compounds and of peptides as

the present invention discloses some compounds of formula (IV) and some peptides as recognized by the Examiner.

The present invention discloses biotin and doxorubicin as active substance according to the present invention. One skilled in the art knows different kinds of active substances which can be used in the scope of the invention and knows, thanks to example 1, points 2 and 3, how to prepare the compound (peptide + active substance) according to the invention.

According to the signal agent which can be used in the scope of the present invention, the specification discloses several kinds of such signal agents (nuclear localizing signal used at the N-terminal end of the peptide to bring the compound (IV) into the nuclear compartment; a peptide sequence able to specifically recognize a determinant present on the surface of a cell type such as pentadecapeptide aM2 for breast cancer cells). One skilled in the art knows other different signal agents which can be used according to the present invention.

Limiting the present invention to the peptides and compounds of formula (IV) disclosed in the present invention is unwarranted because the teachings of the present invention can be used for other peptides and for other compounds of formula (IV).

As explained above, one skilled in the art knows the active ingredients which can be used to treat any pathology affecting humans or animals, knows several examples of signal agents which can be used to vector the compound of formula (IV) to a particular cell type, a particular cell compartment or a particular organ.

In Applicants' opinion, the rejection under 35 U.S.C. 112, second paragraph is no longer appropriate in view of the above comments and the amendments to claims 21, 29, 35, and 36. The claims in the application, when read in light of the specification, are definite and comply with the requirements of 35 U.S.C. 112, second paragraph.

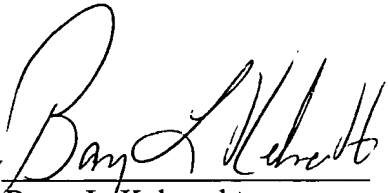
For the foregoing reasons, the instant application is believed to be in condition for allowance. Such allowance is respectfully solicited.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, the Examiner is respectfully requested to contact Applicants' attorney at the telephone number listed below.

Appl. No. 09/485,571
Amdt. dated Dec. 2, 2003
Reply to office action of June 2, 2003

A request for a three month extension of time is enclosed herewith. Also enclosed herewith is a check in the amount of \$475.00 to cover the cost of the extension of time. Should the Commissioner determine that an additional fee is due, he is hereby authorized to charge said fee to Deposit Account No. 02-0184.

Respectfully submitted,

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Date: December 2, 2003

I, Nicole Motzer, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on December 2, 2003.

